

SYLLABUS

Instructor: Dr. Yun Yoo

Course Number: Math 251 **CRN:** 12027 **Section:** 001

Class Time: Tuesday and Thursday between 8:00 am and 9:55 am

Classroom: BR-29

E-mail: yyoo@ccp.edu (The best way contact me)

Office: B1-9D

Office Hours: Mondays 2:50 pm-5:50 pm,
Wednesdays 1:45 pm-3:15 pm, Thursdays 3:50 pm-5:20 pm
or an appointment

Webpage: <http://faculty.ccp.edu/faculty/yyoo/> (you can find hw set/AQs)

Text: Elementary Statistics by Mario F. Triola (11th ED)

Course Description: Algebra-based statistics for science. Statistical topics include descriptive measures, graphical methods, discrete and continuous probability distributions, estimation, one- and two-tailed hypothesis testing and categorical data.

Student Outcomes: Student will be able to

- (a) graph a set of one-variable data and identify symmetry, skewness, number of clusters, and outliers.
- (b) make a scatter plot of two-variable data and use it to describe the linear correlation between the two variables.
- (c) compute and interpret one-variable and two-variable descriptive statistics including mean, median, mode, range, standard deviation, variance, correlation, slope, and intercept.
- (d) use probability rules, counting rules, and formulas to compute probabilities.
- (e) compute confidence intervals and test hypotheses about proportions, means, and variances.
- (f) algebraically manipulate statistical formulas to derive other statistical formulas.

Calculator: TI-30X IIS or better one for your calculations.

Prerequisites: MATH 118 with a grade of "C" or better or MATH 161 (or higher) placement.

Homework: It is especially important that you keep up with the homework.
Homework will be assigned at the end of each class, but it will not

be collected. We will discuss some of these problems in class, and I will be glad to help you outside class as well, but it is your responsibility to do homework. Do not allow yourself to fall behind, and seek help if you are having difficulty.

Attendance: Attendance will be taken at each class by means of an “Attendance Quiz.” These are for practice and fun. I will give you solutions of each AQ at the end of class so that you shouldn’t ask me solutions before taking exam. **There is a college policy allowing at most 4 absences during the semester. In the event that you do not meet this policy, you will be dropped from the class.** Regular attendance is necessary in order to master the material. It is your responsibility to find out what you have missed due to absence. It is important that you try to do the work you have missed.

Test: There will be 3 tests and a comprehensive final exam. Everyone must take the Comprehensive Final Exam. If not, you will get “F”. Notice that No test grade will be dropped.

Makeup Policy: Make-ups are the discretion of the instructor and require prior approval and a written, acceptable medical excuse.

Help
There are several resources for students with questions. First and foremost, you should participate and ask questions in class. If you still have unanswered questions, please feel free to stop by my office during the office hours. More importantly, **CCP provides free tutoring and workshops in Room B2-36 (South Learning Lab) for daytime and Room B1-28 (Central Learning Lab) for evening time.** Many students find it helpful to form study groups for doing homework and studying for tests. It is a great way to learn materials.

Grading: The course average will be computed using **the average of the three tests (75%) and the final (25%).** Your written final grade will be determined as follow:

90-100 % (360 - 400 pts)	A
80-89 % (320 - 359 pts)	B
70-79 % (280 - 319 pts)	C
60-69 % (240 - 279 pts)	D
0-59 % (0- 239 pts)	F

Inclement weather: In the event of inclement weather there are several ways of determining whether CCP is open. An announcement indicating that the College is closed due to a weather emergency will be place on both of the main switchboard numbers (215-751-8000 and 215-751-

8010). The closing announcement will play if these number are called. There is another way is that the notice of college clsing will be place on the college's home page (www.ccp.edu) and on the college's portal log-in page (my.ccp.edu).

Spring Semester 2013:

Final day to drop course for spring 2013 without penalty of 'F' grade: **Monday, April 8.**

Spring Vacation-No class: Monday-Saturday, March 3-10

Last Day to class: Tuesday, April 23 for T/Th classes

Final Remarks:

- **Absolutely NO PHONE in the classroom.**
- **Avoid any behavior that can be disturbing to the class.**
- **Be respectful to me and to your classmates.**
- **No food or gum during class.**

Lecture Schedules

Text: Elementary Statistics by Mario F. Triola (11th ED)

Week #1 (Jan 15-17)	T	1. Introduction to Statistics; 2-2 Frequency Distributions
	Th	2-3 Histograms; 2-4 Statistical Graphics
Week #2 (Jan 22-24)	T	3-2 Measures of Center; 3-3 Measures of Variation
	Th	4-2 Fundamentals ; 4-3 Addition Rule
Week #3 (Jan 29-31)	T	4-4 Multiplication Rule: Basics; 5-2 Random Variables
	Th	5-3 Binomial Probability Distributions
Week #4 (Feb 5-7)	T	5-3 Binomial Probability Distributions
	Th	5-4 Mean, Variance, and Standard Deviation for the Binomial
Week #5 (Feb 12-14)	T	Test 1
	Th	6-2 The Standard Normal Distribution
Week #6 (Feb 19-28)	T	6-3 Applications of Normal Distributions
	Th	6-6 Normal as Approximation to Binomial
Spring Break: College Closed, March 3-10		
Week #8 (March 12-14)	T	7-2 Estimating a Population Proportion
	Th	7-3 Estimating a Population Mean: σ Known

		7-4 Estimating a Population Mean: σ Not Known
Week #9	T	7-5 Estimating a Population Variance
(March 19-21)	Th	Test 2
Week #10	T	8-2 Basics of Hypothesis Testing
(March 26-28)	Th	8-3 Testing a Claim about a Proportion
Week #11	T	8-4 Testing a Claim about a Mean: σ Known
(April 2-4)	Th	8-5 Testing a Claim about a Mean: σ Not Known
Week #12	T	9-2 Inferences about Two Proportions
(April 9-11)	Th	9-3 Inferences about Two Means: Independent Samples
Week #13	T	9-4 Inferences from Matched Pairs
(April 16-18)	Th	Test 3
Week #14	T	10-2 Correlation/10-3 Regression
(April 23)		
Week #15	Comprehensive Final Exam	
(April 26-May 2)		